

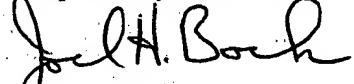
clip" (claims 7 and 8). In the Office Action it is agreed that Ito 5,735,706 does not disclose a conductive extension in electrical engagement with the clip. Hower 5,860,829 is cited as disclosing a conductive extension. We presume the Examiner refers to the ground contact 18 in Hower '829. However, close examination of Hower reveals that his ground contact 18 is not electrically shorted to or in shorting electrical engagement with the IDC terminals 20, which are the counterpart to applicant's clip.

The mounting of the ground contact 18 is described in Hower Col. 4, lines 46 - 56. Ground contact 18 has latching recesses 114 which engage embossments 38 on the side of the base 12. As seen in Figs. 8 and 10 this places the contact 18 well to the rear of the IDC terminals 20 which are mounted in slots 26. Clearly, there is no direct physical engagement between IDC terminals 20 and ground contact 18. Hower does have an overvoltage protector 22. It has a grounding terminal 120 that is received in the slot 116 in the ground contact 18. The overvoltage protector 22 further includes two signal terminals that are electrically connected to the IDC terminal slots 100. However, Hower is unclear what electrical connection, if any, is made between signal terminals 122 and grounding terminal 120. Applicant submits that the overvoltage protector may be in the nature of a zener diode. In that case, if the voltage between terminals 122 become too high, the device will connect to ground through terminal 120. But in the normal state of Hower's circuit, there is no connection from 122 to 120 and the wires inserted into the IDC terminals would not electrically connect to the ground contact. Whatever the nature of the specific device 22 in Hower, what is clear is that to provide overvoltage protection as stated in Hower, the protector 22 can not provide an electrical short circuit between the IDC terminals 20 and the ground contact 18, as now called for in the amended independent claims.

It is further pointed out that Hower is not concerned with providing an extension electrically shorted to a conductive clip. This is evident not only from the use of the overvoltage protector 22 but also from the alternate embodiment of Hower's Fig. 9. This version replaces the overvoltage protector with a bridging contact 140. See Col. 5, lines 3 -10. There it states that bridging contact is engaged by the two IDC terminals "thereby commoning the adjacent terminals to each other". There is no mention of connecting contact 140 to the ground contact 18. Comparison of Figs. 8, 9 and 10 shows the shape of the connecting contact 140 makes it impossible for contact 140 to engage the ground contact 18. Accordingly, the ground contact 18 in Fig. 9 of Hower has no electrical connection whatsoever to the IDC terminals. This highlights the lack of motivation in Hower to combine it with Ito in the manner suggested in the Office Action. And to reiterate, even if Hower's overvoltage protector 22 were incorporated directly in Ito, it would normally not provide electrical connection to the extension. It would do so only in an overvoltage condition. The claims were amended to distinguish over this possibility of intermittent electrical connection in Ito plus Hower by stating that the electrical connection between the clip and the extension must be an electrical short. In Ito plus Hower it is not a short.

It is submitted that the above amendments place the application in condition for allowance. Accordingly, the application is resubmitted for reconsideration. A favorable action is respectfully requested.

Respectfully submitted,

  
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MARKED UP COPY OF CLAIMS SHOWING CHANGES MADE

1. (Amended) A wire connector for joining two or more incoming wires having conductors, comprising:

    a housing having walls defining a cavity therein with openings in the walls, said openings permitting the incoming wires to extend into the cavity;

    an electrically conductive clip disposed in the cavity and held fixed in the housing by the walls, the clip having at least first and second retaining fingers each of which engages an individual conductor to hold the conductor fixed in the housing; and

    a conductive extension in shorting electrical engagement with the clip and extending through a housing wall to the exterior of the housing.

7. (Amended) A method of connecting two or more wires having conductors to a common terminus, comprising the steps of providing a push-in wire connector having a conductive clip inside an insulative housing, providing a conductive extension electrically shorted [connected] to the clip and extending to the exterior of the housing, pushing the stripped ends of the conductors of the first and second wires into the housing and into engagement with the clip, and attaching the extension to said terminus.

8. (Amended) A method of connecting two or more wires having conductors to a common terminus, comprising the steps of providing an insulation displacement connector having a conductive clip inside an insulative housing, providing a conductive extension electrically shorted [connected] to the clip and extending to the exterior of the housing, placing

first and second wires adjacent the clip, closing the housing to force the wires' conductors into engagement with the clip, and attaching the extension to said terminus.